



AL-1813 8-Way Clocked Relay Card Installation Instructions

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Introduction

This is the GE *AL-1813 8-Way Clocked Relay Card Installation Instructions*. The AL-1813 relay card provides eight single-pole double-throw (SPDT) relays with connection terminals to the common (C), normally open (N/O), and normally closed (N/C) contacts.

You can connect the relay cards together to provide up to 16 relays with a DGP, 32 relays with an AL-1255 4-Door Controller DGP, or 255 relays with an Alliance control panel.

An LED is provided for every relay to indicate activation.

Installation

You can mount one AL-1813 relay card inside some control panels or AL-1255 DGP enclosures and up to two relay cards in all 8 to 32-zone DGP enclosures (depending on what other modules are fitted in the enclosures). You will need a separate enclosure to mount additional relay cards.

Table 1 shows the maximum AL-1813 relay cards allowed per device.

Table 1. Maximum relay cards per device

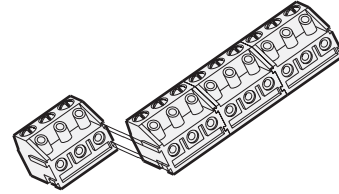
Device	Maximum cards	Maximum usable relays
Control panel	32	255
DGPs (all versions)	2	16
AL-1255 4-Door Controller DGP	8	32

Note: Clocked relay/open collector cards and 4-way relay cards cannot be used together on the same device.

To mount the relay card, do the following:

1. Slide the terminal blocks together (*Figure 1*).

Figure 1. Terminal block assembly



2. Slide the terminal blocks over the pins on the card (*Figure 2*).



CAUTION: You must be free of static electricity before handling circuit boards. Wear a grounding strap or touch a bare metal surface to discharge static electricity.

3. Slide the relay contact programming jumpers over the pins for the required programming (*Figure 2*).
Jumper removed or placed on center pin only. Dry contact.
Jumper on center pin and plus pin. Supplies AUX plus to the relay common terminal.
Jumper on center pin and minus pin. Supplies AUX minus to the relay common terminal.
4. Mount the card in the enclosure using the four clip-in stand-offs and the mounting screws.
5. Power down the system and plug the interface cable into the control panel or DGP and into the card (*Figure 3* on page 2).

Figure 2. Mounting the terminals and jumpers

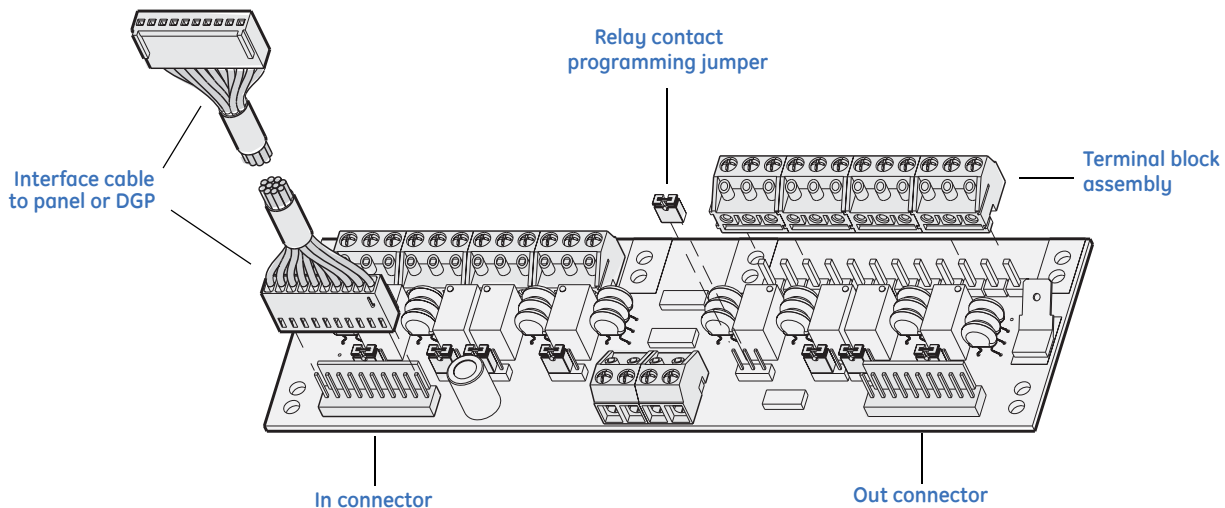
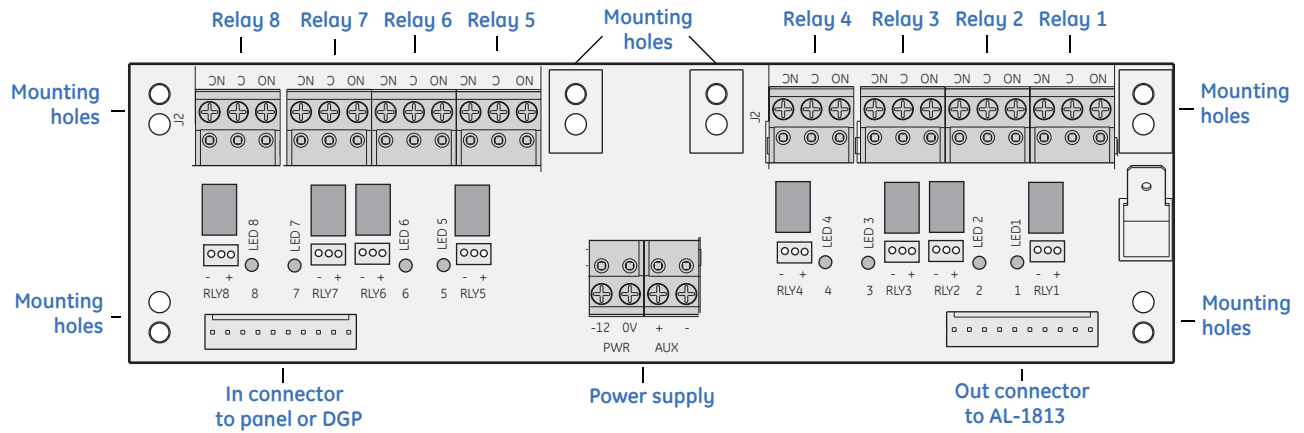


Figure 3. Circuit board components



Wiring

Table 2 shows the In Connector (Figure 3) wiring connections between the relay card and the control panel or DGP.

Table 2. Connection to panel or DGP

AL-1813 (In connector)	Control panel (H8), AL-1255 (J21), or AL-1205 (J8)	
	Name	Connections
1	+12V	1
2	Data	2
4	Latch	4
5	CLK	5
10	0V	10

Table 3 shows the Out Connector (Figure 3) wiring connections between two AL-1813 relay cards.

Table 3. Connections between relay cards

AL-1813 (Out connector)	AL-1813 (In connector)	
	Name	Connections
1	+12V	1
2	Data	2
4	Latch	4
5	CLK	5
10	0V	10

The following power supply connections (Figure 3) are provided on the relay card:

PWR (+12V, 0V). Use the +12V and 0V power supply connection terminal when you need to make the supply connection using heavier gauge cable, or from a separate power supply, in order to minimize the voltage drop over longer distances or reduce current drain on the control panel or DGP.

AUX (+, -). The AUX plus and minus terminals are completely separate from the PWR connections. Use the AUX plus and minus terminals to link the common contacts of the eight relays to an AUX plus or minus voltage source.

RLY. Use jumper relays 1 to 8 to link each of the common contacts of the relay to AUX plus or minus, as required.

Specifications

Supply voltage	9 to 14 VDC
Current consumption	
Standby	50 mA
All relays active	200 mA max.
Contact ratings	1 A at 0 to 30 VDC
Dimensions	6.9 x 2 in. (176 x 52 mm)
Operating temperature	32 to 122°F (0 to 50°C)
Humidity	95% noncondensing
Listings	UL 294 Standard for Access Control System Units UL 365 Standard for Police Station Connected Burglar Alarm Units and Systems UL 609 Standard for Local Burglar Alarm Units and Systems UL 1610 Standard for Central-Station Burglar-Alarm Units UL 1635 Standard for Digital Alarm Communicator System Units

Technical support

Toll-free: 888.GESECURITY (888.437.3287 in the US, including Alaska and Hawaii; Puerto Rico; Canada).
Outside the toll-free area: Contact your local dealer.